Fall River Landfill – Fact Sheet &_Proposed Closure Project

November 2014

A ten acre unlined and uncapped area of historical waste disposal is located on and off the landfill property adjacent to the closed Fall River landfill. MassDEP requires all areas of waste disposal to be properly closed and monitored. A single unified solution is being proposed to address all of the historic waste disposal areas in accordance with MassDEP Solid Waste Regulations.

Background

The main area of the Fall River Landfill encompasses approximately 126 acres and is located at 1080 Airport Road, Fall River, Massachusetts. In November 2014, the landfill ceased accepting waste. Specific portions of the landfill, called phases, have been properly closed and are being monitored. The remaining areas of the main landfill will be capped in 2015 by Browning Ferris Industries Inc. ("BFI") which owns the closed landfill operates a 1000 ton per day solid waste transfer station on the landfill property.

Previously, the City of Fall River owned and operated the Landfill from the 1930's until 1981. A private entity, Fall River Landfill, Inc. owned and operated the Landfill between 1981 an 1987.

Environmental investigations have determined that waste is buried in the southwestern area of BFI's property, outside the main landfill mound, and on two adjacent properties currently owned by Rex Cut Products and by Fall River Freeholders Limited Partnership. Aerial photographs illustrate historic waste disposal occurred during the late 1960's and early 1970's, prior to Fall River Landfill Inc.'s 1981 purchase of the Landfill from the City of Fall River. The areas containing this waste must be capped and monitored in accordance with MassDEP Solid Waste Regulations and Policies.

BFI, on behalf of the current private property owners and the City of Fall River, has proposed a single unified solution to address all of the historic waste disposal areas in accordance with MassDEP Solid Waste Regulations and Policies (the "Proposal").

Proposed Landfill Closure Project

On November 18, 2014, BFI submitted to MassDEP a document entitled "Proposal for Final Closure Activities at Inactive Unlined Landfill Areas Southwest of Phase 1". The conceptual Proposal is consistent with MassDEP's landfill closure requirements and policies.

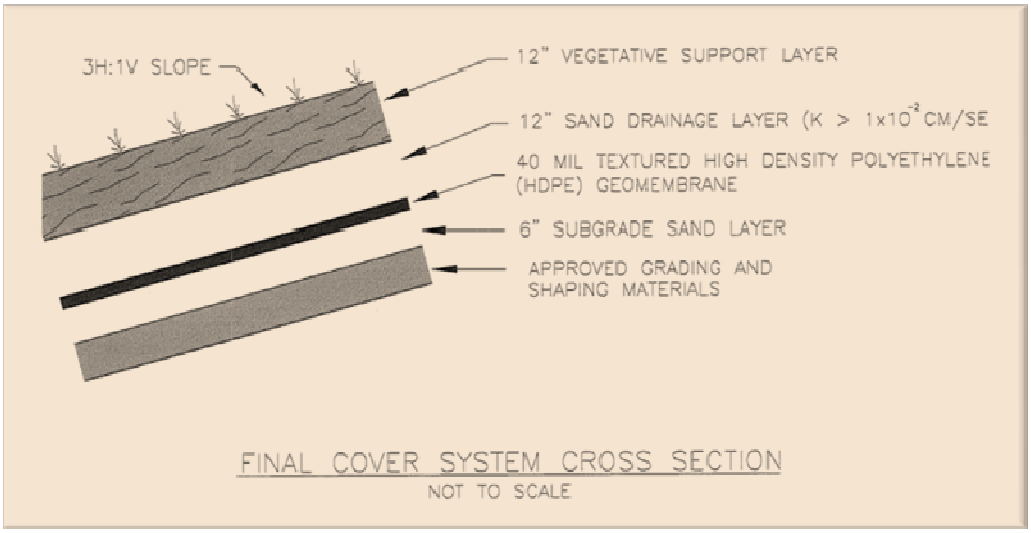
The Proposal includes:

- Minimizing the footprint of the unlined waste area and the amount of material needed by consolidating existing waste into a 9.7 acre area.

- Importing 252,000 cubic yards of approved materials to regrade the site to support a standard landfill cap for the historic waste areas. MassDEP allows for the re-use of clean soil, regulated soils (as defined by DEP Policy # Comm-9-001) street sweepings, recycled soils, catch basin cleanings, and dredge spoils. The proposed project will not include coal ash or fines and residuals generated at construction and demolition processing facilities.

- Limiting the amount of imported materials to the minimum 5% grade amount required for proper closure and to the amount required to generate sufficient funds to cover the costs of closure, post closure monitoring and maintenance.

At the proposed average material acceptance rate of 1000 tons per day, the project will take about three years to complete, including two years of materials acceptance followed by construction of a final cover system during the third year. The final cover system will consist of a gas vent layer, a liner, a thick sand drainage layer, and a topsoil layer will be placed and seeded. Stormwater controls and a passive landfill gas system will be included.



Traffic Plan

Grading and shaping materials will be trucked to the site using tractor trailer trucks. On average, 1000 tons per day of material, which will require 33 trucks per day on average, will be delivered to the site. The maximum number of trucks for this proposal, including the existing transfer station operation, will not exceed the average annual amount of truck traffic from the recently closed landfill. Two delivery routes are proposed for haulers bringing material to the site: Route 24 to Exit 8 to Airport Road and Route 24 to 8B, Innovation Way, through the Fall River Industrial Park.

Community Benefits

The main concern with unlined landfills is the generation of leachate and its affect on the surrounding environment including groundwater, surface water, and sediments. Leachate is generated by rain percolating through waste disposed at a landfill. Once in contact with the solid waste, the percolating water becomes contaminated and then it flows out of the bottom of

the waste into soils and into groundwater below, and is called leachate. Properly capping an unlined landfill significantly reduces the generation of leachate.

The proposed single unified solution will expedite the final closure for the entire landfill, avoid costs associated with potential litigation regarding past and present ownership and operations, save taxpayer dollars, and provide funds for the long term maintenance and monitoring program. Whether or not this proposed landfill closure project goes forward, the existing 10 acres of historic landfill waste must be properly capped in order to prevent adverse impacts.

Public Involvement Steps Associated with Proposal

- The Proponent, BFI, submits a conceptual closure plan to MassDEP for review. If MassDEP determines the proposed conceptual closure plan is consistent with Department regulation and policy the Proponent moves to the next step.

- The Proponent holds a public informational session to present information and to answer questions from the community.

- A 21 day public comment period is held on the proposal.

- Public comments are reviewed and responded to by the Proponent. MassDEP will review all comments and responses which could result in the Proposal being clarified or modified.

The Proposal may or may not be implemented depending on a number of factors including, for example, the ability of the proponent to adequately address issues raised during the public comment process, logistical issues, and/or the financial viability of the project.

Necessary Steps to Close a Landfill

MassDEP's Solid Waste Regulations set out the requirements for proper landfill assessment and closure. The landfill assessment and closure process consists of 4 stages:

- Initial Site Assessment (ISA)- evaluate existing information and develop a Scope of Work for:
- Comprehensive Site Assessment (CSA)- define the nature and extent of contamination and risk
- Corrective Action Alternative Analysis (CAAA) – evaluate options for a standard final cover system
- Corrective Action Design (CAD) – Design the site specific final cap system

Environmental Investigations/Results

Since 1994 fifteen studies have been conducted at the landfill site and the Comprehensive Site Assessment process is 95% completed. Groundwater sampling of monitoring wells placed around the landfill and surface water locations are conducted every 4 months. Landfill soil gas is monitored every 4 months.

The extent of off-site waste has been evaluated. The MassDEP will require additional investigations for the historic waste disposal area, for example, the installation of monitoring

wells to complement the Comprehensive Site Assessment work done to date. The additional investigations will be conducted during landfill closure.

There are monitoring wells downgradient of the unlined capped landfill area and the contiguous historic waste disposal areas. The groundwater under and downgradient of the unlined capped area has been characterized. The concentration, direction, and groundwater flow characteristics have been thoroughly evaluated and impacts from the contamination are tracked and monitored. Analytical results reveal the groundwater under and downgradient of the unlined and capped areas is contaminated. Three volatile organic compounds (i.e. trichloroethylene, vinyl chloride, cis-1, 2-dichloroethylene) have been historically detected and continue to be detected in one bedrock monitoring well downgradient of the unlined capped area at concentrations exceeding MassDEP's cleanup standards. Extensive testing of underground utility conduits, soil-gas and groundwater samples from locations downgradient of the landfill indicate that the compounds exceeding cleanup standards are confined to groundwater within the landfill property and are currently not a potential source of contamination off-site. Surface water and sediment have been impacted by landfill operations and other urbanized impacts such as contaminated storm water runoff.

Groundwater flow is away from the North Watuppa Pond drinking water supply. There are no private or public water supplies down gradient of the landfill. Currently no risks to human health exist. However, the historic waste disposal area must be properly capped to prevent future potential adverse health and environmental impacts.

Opportunity for Public Involvement

A Public Informational Session will be held
on November 24, 2014 at 6:30 PM
at City Hall, One Government Center,
Fall River Massachusetts.

A public comment period on the proposed project will be open from November 24, 2014 through December 16, 2014

A copy of the Proposal can be found at the following web link:
http://www.mass.gov/eea/agencies/massdep/about/contacts/southeast-region.html#FacilitiesProjectsSitesofInterest

Comments or concerns regarding this proposal should be sent in writing to:
Mark Dakers, Solid Waste Section Chief
Massachusetts Department of Environmental Protection
Southeast Regional Office
20 Riverside Drive
Lakeville, MA 02347 or by email:
Mark.Dakers@state.ma.us